

UTS 30



The UTS 30 display station is a powerful editing terminal or user programmable terminal/desktop computer. It is designed for anyone who needs to access and handle information—from office workers to data processing personnel. The UTS 30 supports a wide range of peripheral devices including one of four printers, a 5 1/4-inch diskette subsystem and a magnetic stripe reader. The basic version of the UTS 30 can be easily field upgraded to the programmable version by replacing a program cartridge with a diskette interface and connecting the 5 1/4-inch diskette subsystem.

Operator comfort was foremost in the design of the UTS 30. Ergonomic and ease-of-use features were part of the UTS 30 design from inception, not added on. Result: the UTS 30 consists of a 12-inch diagonal CRT display and new low profile keyboard. The non-glare display is flicker-free and produces extremely sharp characters. Brightness and background contrast are operator adjustable. An optional tilt/rotate base is available.

The personality of the basic UTS 30 is provided by a program cartridge, conveniently accessible from the top of the UTS 30, providing many advantages to the user. System updates and future

UTS 30 enhancements can be accommodated by the simple insertion of a new cartridge.

In the programmable UTS 30, the program cartridge is replaced by a diskette interface that supports one to four diskettes. The personality of this programmable UTS 30 is loaded from diskette, and thus can also be easily updated. Personalities supported include UNISCOPE and DDP-4000 modes. DDP-4000 mode provides operator interface and applications compatibility with UNISCOPE, but utilizes the advanced UDLC link protocol, and offers distributed processing functions.



The programmable UTS 30 supports UTS COBOL and a stand-alone Text Processing Utility (TPU), as well as several utility programs. With the addition of CP/M®, users may choose from a wide variety of compiler languages and application programs available at low cost from independent software vendors.

The UTS 30 supports the advanced CP/M PLUS®; 64K of RAM is available to the user, while additional memory is supported by CP/M for enhanced performance and improved user interface. With the large and constantly growing library of low-cost CP/M based application software, a UTS 30 with this feature is transformed into a cost-effective desktop business computer when not in the terminal mode.

The programmable UTS 30 offers a Dot Graphics feature which permits the terminal to operate stand-alone using either the SPERRY Business Graphics Utility or the CP/M Graphics software. The UTS 30 may also operate interactively with the MAPPER System Graphics.

The Dot Graphics feature is controlled by its own 16-bit microprocessor and provides a 375-dot vertical by 512-dot horizontal array—60 dots per inch (2.6 dots/mm).

The programmable UTS 30 supports Videotex—an interactive information retrieval service. When loaded with the Videotex Terminal

Control Program from a 5 1/4-inch diskette, the UTS 30 can access the Videotex services that conform to the control/character codes and interface specifications outlined in the PRESTEL Terminal Specification—Edition One. The services that conform include:

- PRESTEL (United Kingdom)
- VIDETEL (Netherlands)
- Viewdata (Switzerland)

Extensive human engineering factors—derived from our years of experience on similar terminals—are an integral part of the UTS 30.

Eye fatigue is reduced by using low contrast colors for the display station and keyboard, and by providing background illumination and improved focus on the display. The non-glare visual display consists of green characters on a dark background. The entire display is flicker-free and the characters are sharp and bright, resulting in excellent legibility and clarity of presentation. Character brightness is operator adjustable.

A new low profile keyboard (30 mm at home row) reduces arm and back fatigue. The optional tilt/rotate base minimizes the need for awkward head or body positions.

The operator's field of view of the display is well within normal eye span, with the nearly vertical CRT providing a natural viewing angle.

The keyboard is designed for comfortable touch typing and the terminal is virtually silent. All the control keys required to operate the terminal and initiate data transfer are located on the keyboard and are easily reached. Because the keyboard is like that of a typewriter, little additional training is required to operate the system and use its many extra capabilities. If the operator desires, the terminal will generate an audible click for each character successfully entered from the keyboard.

All these features contribute to maximum operator comfort.

Proven field control features provide basic data entry capabilities without the need for a user program. These include such items as right justification, alpha/numeric checking, automatic tabulation settings, and non display.

Field control is accomplished with the help of Field Control Characters (FCC's), first introduced on the UTS 400 visual displays.

The parameters setup capabilities of the UTS 30 offer users a great deal of flexibility to accommodate operator preferences or application requirements. These parameters can be set after inserting a supervisor key, and include such features as:

- Field highlighting by reverse video or low intensity
- Destructive space bar
- Timeout values
- Audible keystroke feedback

Peripherals supported by the UTS 30 include the SPERRY 0797 and 0798 impact printers, the 425 high quality printer, and the 431 correspondence quality printer.

The UTS 30 is equipped with an RS232/V.24 communications interface, allowing it to be connected to a host system from remote locations. An X.21 interface may be selected for connection to Public Data Networks. Line sharing is achieved by multidropping or multiplexing via the SPERRY Terminal Multiplexer.

The UTS 30 transmits synchronously in ASCII code—the industry standard—at transmission speeds up to 9600 bits per second. A direct connect feature allows the user to bypass modems when the terminals are located at the host site.

Programmability

- UTS COBOL (subset of ANSI Std. X3.23—1974)
UTS COBOL programs are compiled on a Sperry host system (Series 1100, System 80, or Series 90)





• **CP/M**

The CP/M software package enables the UTS 30 to operate as a stand-alone computer. The CP/M PLUS operating system is supplied by Sperry on diskette.

The package includes an assembler, utilities, and extensive documentation. CP/M compatible high level language compilers and application programs may be purchased directly from independent software vendors.

Communication utilities provide either asynchronous communications in TTY protocol or synchronous communications in UNISCOPE protocol.

Peripheral Configurability

- Up to 2.6 megabytes of 5 1/4-inch diskette storage
- Choice of one of the following printer models
 - Model 25 high quality/medium speed matrix printer
 - Model 31 correspondence quality printer
 - 0797 80-column matrix printer
 - Model 35 matrix printer

Software Utilities

- Diskette file management
- Text processing utility
- Character set utility
- File transfer utility
- Business Graphics utility

Other features of the UTS 30 include:

- Screen bypass
- Character descenders
- Reverse video and high/low intensity

- User entry site parameters including station and device identifiers
- 25th display line for indicators
- Line monitor function via control page
- UNISCOPE character protect in basic unit
- Up to 80 field control characters per line
- Emphasis attributes such as underline and strike-through
- Non-display field option

SPERRY UTS 30

FUNCTIONAL CHARACTERISTICS

Display Format Selections

Any display format may be selected from 2 lines of 2 characters each to 24 lines of 80 characters each.

Display Size

12 inch diagonal

Character Generator

10 x 16 dot matrix, refresh rate of almost 70 times per second.

Character Generator

Soft character generator for storage of 256 or 512 characters.

Transmission Code

7-level ASCII plus parity bit

Transmission Mode

Half-duplex

Transmission Facilities

Voice grade (telephone switched network or private line)

Transmission Type

Synchronous

Transmission Rates

Up to 9,600 bits per second

Communications interfaces

EIA RS232C/CCITT V.24

Data Integrity Provisions

- Minimum single bit error detection on communication line and peripheral transfers
- Automatic retry with communication line and peripheral transfers
- Internal parity checking

Single Two Key Security Keylock

Operator Key
Supervisor Key

Selective Addressing

Host processor can select any terminal or peripheral device or both. Host can initiate data transfer from the terminal or peripherals.

Low Profile Keyboard

- Expanded Typewriter (full function with numeric keypad)
- Expanded Typewriter with Text Processing Keys

Language Selections

Domestic (U.S. ASCII)
United Kingdom
French
German
Spanish
Danish/Norwegian
Finnish/Swedish
Italian

Protected Format

Protection of specified data fields as defined by field control characters or UNISCOPE character protect sequences.

Program Attention Keys

Keys that generate unique codes for use as requests or indicators to host or user programs, extending operational and system control.

Editing and Other Function Keys

- Cursor control
- Character, field, line, screen editing
- Peripheral control
- Miscellaneous

PHYSICAL CHARACTERISTICS

Width: 16.75 inches (42.5 cm)
Height: 12.75 inches (32.5 cm)
Depth: 17.00 inches (43.0 cm)
Weight: 40 pounds (18 kg)

POWER REQUIREMENTS

Nominal Voltage
110, 120, 220, or 240 volts

Nominal Frequency

50 or 60 Hz

Phases and Lines

Single phase, 3 wire

Input Power Required
180 volt-amps

Heat Dissipation
274 BTU/hr.

Power Dissipation
468 kJ/hr.

PERIPHERAL DEVICES

SPERRY 8439 double-sided Diskette Subsystem

FUNCTIONAL CHARACTERISTICS
Storage capacity per diskette 655K bytes (maximum 2 diskette drives per subsystem)

Transfer rate
31.25 kilobytes per second

PHYSICAL CHARACTERISTICS
Width: 14.50 inches (36.8 cm)
Height: 3.25 inches (8.3 cm)
Depth: 13.10 inches (33.3 cm)
Weight: Approx. 10 pounds (4.55 kg) (with single diskette drive) (13 pounds, 5.91 kg, with dual drive)

POWER REQUIREMENTS

Nominal Voltage
100, 120, 220, or 240 volts

Nominal Frequency
50 or 60 hz

SPERRY Model 31 Printer Correspondence Quality Printer

FUNCTIONAL CHARACTERISTICS

Print Speed
55 CPS Shannon text

Character Sets

More than 100 different type styles and character sets

Daisywheel full form characters

PHYSICAL CHARACTERISTICS

Width: 23.22 inches (58.8 cm)
Height: 6.63 inches (16.8 cm)
Depth: 16.75 inches (42.5 cm)
Weight: 37 pounds (16.6 kg)

POWER REQUIREMENTS

Nominal primary power
120/220/240V 50/60 Hz.

SPERRY Model 25 Printer High Quality Printer

FUNCTIONAL CHARACTERISTICS

Print Speed
160 CPS (10 C/I)—9 x 7 Matrix
40 CPS (10 C/I)—18 x 40 Matrix

Character Sets

A selection of national sets available

Character Matrix

9 x 7—draft quality printing
18 x 40—high quality printing

PHYSICAL CHARACTERISTICS

Width: 19.33 inches (49.1 cm)
Height: 6.22 inches (15.8 cm)
Depth: 9.65 inches (24.5 cm)
Weight: 16.5 pounds (7.5 kg)

OTHER REQUIREMENTS

Nominal Primary Power
120/220/240V 50/60 Hz.

SPERRY 0797 80-column Matrix Printer

FUNCTIONAL CHARACTERISTICS

Print Speed
80 CPS

Character Sets

A selection of national sets available

Character Sets

9 x 7 half space dot matrix

PHYSICAL CHARACTERISTICS

Width: 13.4 inches (34 cm)
Height: 4.25 inches (10.8 cm)
Depth: 9.6 inches (24.5 cm)
Weight: 13.2 pounds (6 kg)



SPERRY Model 35 Printer High Quality Printer

CHARACTER SETS

A selection of national sets is available.

FUNCTIONAL CHARACTERISTICS

Print Speed

400 CPS (10 C/I)—9 x 7 matrix
167 CPS (10 C/I)—18 x 40 matrix

PHYSICAL CHARACTERISTICS

Height: 9.4 inches (240 mm)
Width: 28.8 inches (656 mm)
Depth: 18.1 inches (461 mm)
Weight: 70 pounds (32 kg)

POWER REQUIREMENTS

Nominal Primary Power
100/120/220/240V 50/60 Hz.



We understand how important it is to listen.